

MALARIA RESEARCH & REFERENCE REAGENT RESOURCE CENTER

Insectary Cleaning and Maintenance

Maintaining a clean work area is important in ensuring healthy stocks. Currently the MR4 vector facility uses the following schedule to maintain the insectary.

Daily duties:

- Wipe down all counters
- Clean all equipment, pans, and cups used in hot water without detergent and allow to dry
- Autoclave all pans that have been cleaned with hot water and completely air dried; pans are not reused until
 after cleaning, drying, and autoclaving

Weekly duties:

- Wipe down all counters with 100% household bleach or 100% ethanol
- Mop floors with a disinfectant cleanser with surfactants
- Check all insect-trapping devices to ensure they are working; clean or replace as needed; currently the MR4 insectary staff use Max Force© Gel for roach trapping and Max Force© Granules for ant control. A major problem to any insectary is ants, especially for an insectary located in warmer climates. If left unchecked, ants could wipe out an entire insectary because they attack adult mosquitoes for food. Controlling ants has the same limitations as controlling cockroaches.
 - We recommend using a granular product that can be applied around the insectary monthly and inside the insectary in case of an emergency. Currently we use MaxForce Ant Bait. It works quickly, although it may not fully reduce the source of ants, only kill those who feed on the bait.
- Cockroach, Ant, and Mosquito Trapping in the Insectary

Cockroach, Ant, and Mosquito Trapping in the Insectary

(Display of these products does not constitute a recommendation or endorsement by the NIAID or any subcontractors.)



Many insectaries are a great environment for cockroaches, but insecticide sprays cannot be used, due to the risk to the mosquitoes. We tried boric acid, various household baits, and of course, better housekeeping, but in spite of our efforts, we continually battled cockroaches - until we tried the MaxForce gel bait. The effect of this product in our insectaries was an immediate and dramatic reduction in numbers. Beware that when infestations were high initially, some cockroaches died and fell into uncovered mosquito pans and mosquito mortality occurred (the active ingredient is fipronil).

Try purchasing it at a commercial pest control supplier, because we've not seen this at popular household department stores.



These UV-downdraft traps are relatively inexpensive and are effective for trapping mosquitoes including *Anopheles* in the insectary. A nice feature of this model is the adult-collection receptacle which is easily removed for examination and cleaning. They are available from www.sharperimage.com. As we have done with the one shown, they can be hung using a simple bracket, but they are designed to rest flat. (Alas. As of this writing, they are available only in one color.)



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Monthly duties:

- Wipe down walls with disinfectant. Currently the MR4 insectary staff uses "Rearing Lab Sanitizing Reagent" www.educationalscience.com
- Wipe down racks with disinfectant; the same disinfectant is used on the racks as on the walls.
- Replace air filters